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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/648,065 | 08/26/2003 | Jeffrey M. Alaimo | 101990025005 | 2935 |

7590 11/16/2005

Mitchell Rose, Ph.D., Patent Agent
JONES DAY
North Point
901 Lakeside Avenue
Cleveland, OH 44114

| EXAMINER | |
|---|---|
| STASHICK, ANTHONY D | |
| **ART UNIT** | **PAPER NUMBER** |
| 3728 | |

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

TNT

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/648,065 | ALAIMO ET AL. | |
| | Examiner | Art Unit | |
| | Anthony Stashick | 3728 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *24 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,2,5,6,8,10-13,15,16,29-31,35-42,46-48,50 and 51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *40-42,46 and 47* is/are allowed.

6)☒ Claim(s) *1,2,5,6,8,10-13,15,16,29-31,35-39,48,50 and 51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 6, 29-31, 35, 48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ravitz et al. 2002/0071597 in view of Glennie et al. 5,800,364. Ravitz et al. '597 discloses all the limitations substantially as claimed including the following: stocking a predetermined number of sets of foot orthotics (orthotics are stocked according to arch height, i.e. stack with arch height A, stack with arch height B, stack with arch height C); each set having a standard arch height that is unique for that set (sets done by arch heights); measuring an arch height of a sole of a foot (see paragraph [0041]); selecting an orthotic from the set for which the standard arch height most closely matches the measured arch height (see paragraph [0034]); the predetermined number of sets is only three (three different arch heights A, B, C); the measuring step includes determining the arch height from a footprint of the sole (see paragraphs [0046] and [0047]); stocking foot orthotics of different arch heights (orthotics are stocked according to arch height, i.e. stack with arch height A, stack with arch height B, stack with arch height C); measuring an arch height of a sole of a foot (see paragraph [0041]); selecting, from the stocked orthotics, an orthotic of which the arch height most closely matches the measured arch height (see paragraph [0034]); the imaging device lying flat on the floor (see Figures). Ravitz et al. '597 does not teach the use of thermal imaging to obtain characteristics of the foot for making the orthotic. Glennie et al. '364 teaches the use of cameras, including thermal imaging cameras, to obtain a three-dimensional image of the user's foot to use as a template for forming an orthotic to fit the image. Characteristics of the user's foot can be measured and obtained from the images to make an orthotic that properly fits the user's foot. One of the

characteristics known to be needed to make a proper orthotic is that of the arch height of the foot. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to use a thermal image camera, such as that taught in Glennie et al. '364, to aid in determining the hot and cold spots of the foot as well as the physical characteristics of the user's foot needed to properly make an orthotic.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1 and 50 above in view of Potter 5,879,725. The references as applied to claims 1 and 50 above disclose all the limitations of the claims except for the orthotics being heat-softened and conforming to the shape of the sole. Potter '725 teaches that orthotics (inserts) placed within a can be heat-softened (as the shoe is) and reformed to conform to the size and shape of the shoe of the shoe for better fit for the user. Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to heat-soften the finished orthotic of the references as applied to claims 1 and 50 above while placing it in the shoe to allow it to conform to the sole for better fit to the user's foot.

5. Claims 8, 10, 11-13, 15-16 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 6 and 35 above in view of Dribbon 5,678,566. The references as applied to claims 6 and 35 above disclose all the limitations of the claims except for the imaging device being thermally sensitive material and the characteristics that go along with that. Dribbon '566 discloses

the following: engaging the sole of a foot against a thermal imaging device 12 to obtain from the device a thermal image of the sole; determining a characteristic of the sole based on the thermal image (see col. 4, lines 36-43); the imaging device includes a thermally sensitive material that exhibits a change in color with a change in temperature (see col. 4, line 58-col. 5, line 2); the imaging device is in the form of a plate configured to lie flat on the ground (see Figures 2 and 3, device is "in the form of a plate" as it appears to be plate-like) and the engaging step includes stepping on the device (see Figure 3, there is no limitation that says the plate is on the ground and stepped on); the determining step includes determining pressure points of the sole based on the thermal image (see col. 5, lines 12-40); determining step includes determining restricted blood flow locations of the sole based on the thermal image (see col. 5, lines 24-27). Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to use the thermal material of Dribbon '566 on the foot plate of the references as applied to claims 6 and 35 above to get an instant "picture" of the user's foot to compare to that in the image for accuracy.

Dribbon '566 does not specifically state that the foot is engaged with the thermal imaging device while the foot is not in the shoe. Dribbon '566 can perform in this fashion since the thermal imaging device is removable from the shoe and includes the type of material disclosed by applicant for applicant's thermal imaging device. Therefore, it would have been obvious to use the device of Dribbon outside a shoe as well as inside the shoe to determine the problem areas of the user's foot. Furthermore, Dribbon does not specifically teach either heating or cooling the user's sole as compared to the thermal imaging device. Dribbon teaches that the thermal imaging device is based on a temperature difference between the user's foot and the temperature of the device, therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made, to heat or cool the user's foot or the device, by any means known for heating or cooling, to get a temperature different reading between the user's sole and the device.

### *Allowable Subject Matter*

6. Claims 40-42 and 46-47 are allowed over the prior art of record.

### *Response to Arguments*

7. Applicant's arguments with respect to some of the claims have been considered but are moot in view of the new ground(s) of rejection. All of applicant's arguments have been responded to in the rejections set forth above.

### *Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Stashick whose telephone number is 571-272-4561. The examiner can normally be reached on Monday through Thursday from 8:30 am until 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 571-272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Stashick
Primary Examiner
Art Unit 3728

ADS